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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/989,373 | 11/21/2001 | Yasuyoshi Serizawa | Q67325 | 1474 |

7590 10/17/2003
SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037

EXAMINER

POKER, JENNIFER A

| | |
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| ART UNIT | PAPER NUMBER |
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2832

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,373

Applicant(s)

SERIZAWA ET AL.

Examiner

Jennifer A. Poker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is a second action on the merits of application filed on November 21, 2001; Amendment B received on July 29, 2003. Amended claims 1 and 2, and newly added claims 3-5 are pending and are being examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant states, "the cylindrical outer portion is capable of being displaced downwardly around the cylindrical inner portion." It was not clear as to what was meant by this limitation. Examiner regarded to drawings, and it does not appear that the outer portion is displaced downwardly over the cylindrical inner portion during the pressing of the switch. It was unclear if there is motion between the outer portion and the inner portion, or if the outer portion is simply placed around the inner portion. Examiner understood that the outer portion simply surrounds the inner portion. Clarification is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,115,108 to Ogawa, et al, in view of U.S. Patent Number 4,401,864 to Ichikawa.

Regarding claims 1 and 2, Ogawa, et al, discloses a switch comprises:

- (1) A housing (abstract);
- (2) An operating knob the operating knob being pivotally supported on the housing (abstract; column 4, lines 58 & 59);
- (3) A contact wiring board having opposing contact end portions (15a, 16a) arranged under push bodies (abstract);
- (4) A rubber switch member interposed between the housing and the contact wiring board having an inner piece comprising conductive contact pieces (19c, 20c) arranged so as to be opposed to the mutually-opposing the contact end portions of the contact wiring board; and switching members in particular, such as rubber buckling portions formed together with the rubber switch member or elastically slidable push members (abstract);
- (5) A rubber buckling portions (19a, 20a) of the rubber switch member as click feeling providing members. As can be seen from figures 2a and 2b, the buckling portions (19a, 20a) are made of a wall portions, an outer (top) portion, and an inner portion with a conductive contact piece (abstract);

The rubber shape of the buckling portions can deformably absorb the difference in stroke between the two rubber buckling portions. As can be seen in figure 5(a), when one side is pressed, the walls of the buckling portions of that side deform while the walls of the opposing buckling portions of the other side remain “un-buckled” not producing a clicking feeling.

Ogawa, et al, discloses the claimed invention except for the plurality of pressing portions extending from the operating knob.

Ichikawa discloses a switch mechanism comprising an operating member in a rockable manner, protuberances formed on the operating member, which when the operating member is depressed, the protuberances, respectively, open or close their associated electrical contacts. (Column 4, lines 41-42, 61-66) (Figures 4 and 5)

One skilled in the art, at the time the invention was made, would have found it obvious to combine the teachings of Ogawa, et al, with the teachings of Ichikawa and extend leg portions from the reverse surface of the operating knob in order to contact the contact portions stationed directly below.

Regarding claim 3, it can be seen in figures 7(a), 7(b), 8(a), and 8(b) of Ogawa, et al, that the wall portions of the buckling portions appear to be “generally” conical shaped.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,115,108 to Ogawa, et al, in view of U.S. Patent Number 4,401,864 to Ichikawa, as applied to claim 1 above, and further in view of U.S. Patent Number 5,510,584 to Norris.

Ogawa, et al, in view of Serizawa, et al, disclose the claimed invention except for an outer portion covering an inner portion.

Norris discloses a snap action membrane switch having an outer cover covering an inner portion rubber cap in order to further protect the cap (abstract; figure 1).

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Ogawa, et al, in view of Serizawa, et al, with the teachings of Norris and cover the inner portion with an outer portion in order to further protect the switching elements.

Response to Arguments

7. Applicant's arguments filed July 29, 2003 have been fully considered but they are not persuasive. Applicant asserts that the buckling portions of the reference do not provide a "clicking feeling". The reference clearly discloses in the abstract, "it is preferable to use some semispherical rubber buckling portions of the rubber switch member as click feeling providing members."

Further arguments are addressed below:

- (a) the objection to the specification (abstract) is withdrawn.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 703-305-4037. The examiner can normally be reached on 10:00-8:30 Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 703-308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Jap
October 14, 2003


LINCOLN DONOVAN
PRIMARY EXAMINER
GROUP 2103